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data. The problems are compounded where time is a significant factor requiring illustration.

It is possible to illustrate greater quantities of data by means of three-dimensional diagrams but these tend to lose clarity and are difficult to execute satisfactorily for use on a two-dimensional surface such as paper or a visual display screen.

SUMMARY OF THE INVENTION

The present invention was developed with a view to providing a method and system of visually representing the relationships between items or groups of data in a more readily understood manner.

According to one aspect of the present invention there is provided a method of visually representing in a computer generated graphic image the relationships between single items or groups of data, the method involving:

- generating a first elongate ribbon in a form suitable for graphic display in a first visually distinct manner;
- attaching a first item or group of data to said first ribbon;
- generating a second elongate ribbon in a form suitable for graphic display in a second visually distinct manner;
- attaching a second item or group of data to said second ribbon;
- generating an intersection for a point at which said first and second ribbons overlap by weaving the two ribbons in a visually distinct form suitable for graphic display; and,
- displaying said first and second ribbons on a display means together with said intersection;
- wherein said intersection is used to provide a visual indication of a relationship between the first and second items or groups of data that can be readily ascertained by viewing the displayed graphic image.

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- Typically said first ribbon is one of a plurality of ribbons forming a first ribbon group, and said first item or group of data is one of a plurality of first items or groups of data attached to the respective first ribbons in said first ribbon group.
- 5 Typically said second ribbon is one of a plurality of ribbons forming a second ribbon group, and said second item or group of data is one of a plurality of second items or groups of data attached to the respective second ribbons in said second ribbon group. Advantageously said intersection is one of a plurality of intersections which together with the ribbons form a weave of said first and second ribbon groups.
- 10 Preferably said first ribbons are displayed in a different colour from said second ribbons. Preferably said first ribbons overlap one or more of said second ribbons in a substantially perpendicular manner. Advantageously said plurality of ribbons within a particular ribbon group can be generated with varying degrees of thickness and height dimensions so as to convey additional information about items or groups of data represented in said particular ribbon group.
- 15 Typically said first ribbons are displayed on said display means in a substantially horizontal orientation and said second ribbons are displayed in a substantially vertical orientation.
- 20 Advantageously each intersection can be generated in one of a plurality of visually distinct forms so as to indicate a plurality of distinct relationships between said first and second items or groups of data. Preferably, in addition to a simple one over one under form, said intersection can take one or more of the following visually distinct forms: one ribbon passes through a single slit in the other ribbon (over-through-under); one ribbon passes through two adjacent slits in the other ribbon so that the passing ribbon is not visible between the two slits (over-through-under-through-over); one ribbon passes through two adjacent slits in the other ribbon so that the passing ribbon is only visible between the two slits (under-through-over-through-under). Preferably said slits are made
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substantially perpendicular to the longitudinal direction of the passing ribbon whereby each of said intersection forms enables one ribbon to be visually dominant. On the other hand, said single slit can be made substantially diagonal to the longitudinal direction of both ribbons at the point of overlap so
5 that neither ribbon will be visually dominant.

Preferably, said weave is one of a plurality of weaves, each weave representing a set of relationships between each first and second items or groups of data of each weave, said weaves forming a map of said set of relationships.
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Preferably, selected ribbons pass from one weave to another within the same map, each ribbon passing from one weave to another representing the same item or group of data in each weave.
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According to another aspect of the present invention there is provided a system for visually representing in a computer generated graphic image the relationships between single items or groups of data, the system comprising:
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means for generating a first elongate ribbon in a form suitable for graphic display in a first visually distinct manner;

means for attaching a first item or group of data to said first ribbon;

means for generating a second elongate ribbon in a form suitable for graphic display in a second visually distinct manner;
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means for attaching a second item or group of data to said second ribbon;

means for generating an intersection for a point at which said first and second ribbons overlap by weaving the two ribbons in a visually distinct form suitable for graphic display; and,
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means for displaying said first and second ribbons together with said intersection as a graphic image on a display means;